

## CLAIMS

1. A probe holding device which includes a probe holding member for holding a blood flowmeter probe and which is used with the blood flowmeter probe when intracerebral blood flow is measured, wherein the probe holding member is allowed to be disposed in a position of being adjacent to and outside a temporal bone while the blood flowmeter probe is held by the member.

2. The device according to claim 1 wherein it comprises two probe holding members, and it further comprises a bridging part which bridges said probe holding members together.

3. The device according to claim 1 or 2 wherein the probe holding members and the bridging part are in the form of a sheet respectively, and an edge portion of each probe holding member is connected together to either edge portion of the bridging part.

4. The device according to any one of claims 1 to 3 wherein it has a U-shape cross section in which the bridging part corresponds to a bottom bar of the U-shape cross section and the probe holding members correspond to

legs of the U-shape cross section which extend from both ends of the bottom bar.

5        5.    The device according to any one of claims 1 to 4 wherein the U-shape cross section is provided by folding a sheet material.

10       6.    The device according to any one of claims 1 to 5 wherein the device is formed of a plastic material.

15       7.    The device according to any one of claims 1 to 6 wherein the probe holding member has a concave portion which is complementary to the form of the probe so that the probe can be fitted into the concave portion.

20       8.    The device according to any one of claims 1 to 7 wherein the probe holding member is able to hold also a temperature sensor.

25       9.    The device according to any one of claims 1 to 8 wherein the blood flowmeter probe is a probe for the laser-Doppler flowmetry.

30       10.   The device according to any one of claims 1 to 8 wherein the blood flowmeter probe is a probe for the

ultrasonic-Doppler flowmetry.

11. The device according to any one of claims 1 to 10  
wherein the probe holding member has a size which allows  
5 the member to be positioned between a temporal muscle  
and a temporal bone.

12. The device according to any one of claims 1 to 11  
wherein the probe holding member has a size which allows  
10 the member to be positioned between a temporal muscle  
and a temporal bone of a rat or a mouse.

13. The device according to any one of claims 2 to 12  
wherein the bridging part further comprises a heating  
15 element.

14. A blood flow measuring device which comprises  
(1) the probe holding device according to any one of  
claims 1 to 13, and  
20 (2) the blood flowmeter probe.

15. The blood flow measuring device according to  
claim 14 wherein the blood flowmeter probe is a probe for  
the laser-Doppler flowmetry or the ultrasonic-Doppler  
25 flowmetry.

16. The blood flow measuring device according to claim 15 wherein the probe holding device further comprises a temperature sensor.

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17. A production process for the probe holding member which is used for the probe holding device according to any one of claims 1 to 13, comprising

10 obtaining a master model which corresponds to a space defined by and between a temporal bone and a temporal muscle, and

then, molding a plastic material based on the obtained master model.

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18. The production process according to claim 17 wherein the master model is obtained by pouring a curable material into the space defined by the temporal bone and the temporal muscle followed by curing the curable material in the space.

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19. The production process according to claim 18 wherein the curable material is a silicone resin.